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REC'D 28 SEP 1998

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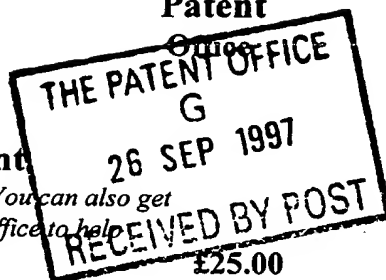
Signed

*Andrew Gersey*

Dated

10 SEP 1998





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P01/7700 25.00 - 9720436.6

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# Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

1. Your reference NMM/DCS/P97869GB
2. Patent application number  
(The Patent Office will fill in this part) 9720436.6 26 SEP 1997
3. Full name, address and postcode of the or of each applicant (underline all surnames) FibreTech Limited  
Brook Mill,  
Hollins Road,  
Oldham,  
OL8 4JY  
Patents ADP number (if you know it) 729297200  
If the applicant is a corporate body, give the country/state of its incorporation
4. Title of the invention IMPROVEMENTS IN OR RELATING TO A POLYESTER FIBRE FILLING
5. Name of your agent (if you have one) W.P.THOMPSON & CO.  
"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode) Coopers Building,  
Church Street,  
Liverpool,  
L1 3AB.  
Patents ADP number (if you know it) 0000158001 JRB
6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number Country Priority application number Date of filing  
(if you know it) (Day/month/year)
7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application Number of earlier application Date of filing  
(Day/month/year)
8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'yes' if:  
a) any applicant named in part 3 is not an inventor, or  
b) there is an inventor who is not named as an applicant, or  
c) any named applicant is a corporate body. YES

9. Enter then number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description 3

Claims(s)

Abstract

Drawing(s)

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (*Patents Form 7/77*)

Request for preliminary examination and search (*Patents Form 9/77*)

Request for substantive examination (*Patents Form 10/77*)

Any other documents  
(Please specify)

11. I/We request the grant of a patent on the basis of this application

Signature

Date 25/09/1997

W.P. Thompson & Co.  
W.P. THOMPSON & CO.

12. Name and daytime telephone number of person to contact in the United Kingdom D. C. SCHILLER  
0151-709-3961.

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### Notes

- If you need help to fill in this form or you have any questions, please contact the Patent Office on 01645 500505
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- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
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DESCRIPTION

IMPROVEMENTS IN OR RELATING TO A

POLYESTER FIBRE FILLING

The present invention relates to a filling comprising a polyester fibre. More particularly it relates to an improved polyester fibre containing filling for use in the soft furnishings industry, such as a filling for bedding, for example duvets, pillows and sleeping bags.

Polyester fibre, usually polyethyleneterephthalate, is an inexpensive alternative to down or feathers. However unlike down it lacks breathability. In an attempt to improve the characteristics of polyester fibre, which has the advantage that it is washable, blends with natural materials such as, for example, cotton, silk, down and feather have been tried.

Considerable effort has been made in the industry to provide a synthetic product which is a real alternative to down. Unfortunately during use, eventually all prior synthetic substitutes develop defects, such as matting of the fibrefill, resulting in the formation of lumps or clumps which show themselves as a lack of uniformity in the article, a reduction of softness and poor breathability.

It is an aim of the present invention to provide a synthetic fibrefill with improved breathability but which retains the desirable properties of polyester fibrefill.

It has unexpectedly been found that cellulosic fibres e.g. Lyocell, manufactured by Courtaulds, when blended with a polyester filling fibre such

as, for example, polyethyleneterephthalate gives rise to a product with improved characteristics including improved breathability compared to a polyester filling fibre alone. The finding was unexpected given that Lyocell fibres are flat and would not have been expected to be a good filling fibre. Lyocell is a cellulosic fibre made by direct dissolution of wood pulp in an organic solvent.

According to the present invention there is provided a blend comprising or consisting of a polyester filling fibre and a cellulosic fibre.

Preferably the cellulosic fibre is Courtaulds Lyocell cellulosic fibre.

Preferably the polyester filling fibre comprises or consists of polyethyleneterephthalate fibre.

Preferably the blend comprises, by weight, no more than 60% Lyocell.

More preferably the Lyocell is present in an amount of from 10 - 60%, more preferably still 20- 50% and more preferably still from 25- 50% of the blend.

Preferably the polyester filling fibre comprises mono fibres which are crimped or conjugate fibres. By conjugate fibres is meant fibres comprising two different fibre-forming polymeric units arranged side by side so that on heat treatment the fibre becomes spirally crimped.

Preferably the Lyocell fibres are saw-toothed crimp fibres.

More preferably the Lyocell fibres and polyester filling fibres are formed into a fibre ball. To form a fibre ball it is preferred to use a Lyocell cellulosic fibre blended with a conjugate polyester preferably of

polyethyleneterephthalate.

Alternatively a Lyocell cellulosic fibre and either a conjugate polyester or a regular saw tooth crimp polyester fibre are blended, carded and layered into a wadding.

According to a further aspect of the present invention there is provided a bedding article comprising a blend of the invention.

The bedding article may be, for example, a duvet, pillow, quilt, sleeping bag, cushion or other similar article.

The blend has characteristics which make it more desirable than polyethyleneterephthalate alone:

- 1) it has a more down like feel;
- 2) weight for weight it is warmer than polyethyleneterephthalate;
- 3) It is breathable, i.e. moisture absorbent; and
- 4) in the case of fibre balls it is more fluid.

The blending of fibres, and the production of fibre balls are well known processes to the man skilled in the art and are not therefore described herein.

PCT/GB 98/02619 - 1 SEP '98 - W. THOMPSON

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